

Independent claim 6 includes the limitations of:

"a data transmission cable linking the transmitter and the receiver, the cable having at least one twisted pair of signal conductors, each of the conductors being separately insulated, an insulation sheath surrounding the twisted pair of conductors and a tensile load carrier surrounding the insulation sheath, the load carrier comprising a sheath of tensile load carrying filaments, wherein the cable has at most seven twisted pairs of insulated conductors within the insulation sheath."

Independent claim 8 includes the limitations of:

- "(a) at least one twisted pair of conductors and at most six twisted pairs of conductors disposed around a center conductor, each of the conductors being separately insulated;
- (b) an insulation sheath surrounding the twisted pairs of conductors; and
- (c) a tensile load sheath surrounding the insulation sheath, the tensile load sheath comprising a plurality of filaments."

Independent method claim 12 includes the structural limitations of a:

"cable having at least one twisted pair of signal conductors and at most seven twisted pairs of signal conductors, each of the conductors being separately insulated, an insulation sheath surrounding the twisted pair of conductors and a tensile load carrier surrounding the insulation sheath, the load carrier comprising a sheath of tensile load carrying filaments."

Every independent claim is thus limited to at most seven conductors where at least one of the conductors is a twisted pair conductor and at most all seven conductors are twisted pair conductors.

Applicant notes that the Examiner has already admitted that Paulsson and Bowers fail to suggest a well logging system as claimed in previously canceled claim 1 wherein the cable has seven twisted pairs of insulated conductors within the insulation sheath. The Examiner has also admitted that the combination fails to teach or suggest a data cable as claimed in previously canceled claim 7, which further comprises six twisted pairs of conductors disposed around a center conductor, all conductors being within an insulation sheath. **See Page 8, paragraph 8, of Paper #13.**

The present claims have all of the limitations of the admittedly allowable claims regarding the insulation and tensile load carrier. With respect to the number of twisted pairs of conductors, the claims add the further limitation of the cables having at most seven twisted pairs of conductors and at most 6 twisted pairs of conductors disposed around a center conductor. Thus every independent claim is further limited to having at most seven total conductors, which was not a limitation in the claims considered allowable over the same primary reference combination of Paulsson and Bowers.

Applicant has broadened the limitation only to the extent to allow a variation in the number of twisted pair conductors to range from at least one to at most seven twisted pairs of conductors.

The Examiner concludes in the current action that Paulsson teaches a cable having at least one twisted pair of signal conductors and thus the present claims are obvious. The Examiner has completely failed to mention the clear new limitation to **at most seven**

twisted pairs of conductors in the rejected claims. There is absolutely no rationale provided in the rejection regarding the upper limit of twisted pairs in the rejected claims and there is no logic provided as to why a cable having seven twisted pairs of conductors would be allowable over the primary combination (paper 13) and where a cable having at most seven twisted pairs would not be allowable over the same primary reference combination.

Applicants original disclosure clearly explains that the standard multi-conductor armored cable is a 7-conductor armored cable used for multiple channel tools. Such so called single conductor wireline cables, or similarly constructed multi-conductor cables, are almost exclusively used to operate downhole electrical devices because of a variety of reasons associated with the space limited and rigorous environment of a borehole."

It is clear that the current independent claims are limited to such standard wireline 7-conductor cables where the one or more of the seven conductors are replaced by twisted pair conductors. The Paulsson reference does not teach a standard 7-conductor wireline cable and does not suggest that the 256 twisted pair conductor cable 30 can be configured as a standard 7-conductor wireline cable, and there is no suggestion in Bowers, or any other art of record, to replace any of the conductors in a standard wireline cable with twisted wire pairs, wether one conductor be replaced or whether any of one to all seven conductors be replaced.

In conclusion, the independent claims include a very limited range for twisted pair conductors and has placed an upper limit to being seven, which limits the overall number of twisted pair conductors. The proposed combination does not teach or suggest the claimed limited range of twisted pair conductors, and thus a prima facie case of obviousness has not been presented.

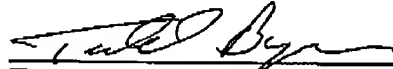
All other claims depend from respective independent claims discussed above. Consequently, the dependent claims are allowable over the art of record for at least the same reasons as stated above for the independent claims.

CONCLUSION

For all of the foregoing reasons, applicant submits that the application is in a condition for allowance. The Commissioner is hereby authorized to charge any fee due for this response and to credit any overpayment to Deposit Account No. 02-0429 (584-23196-US-CE).

Respectfully submitted,

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